IN THE CLAIMS

Please amend the claims as follows:

Claim 1 (Previously Presented): A neutron detector comprising

scintillating material $Cs_{(2-z)}Rb_zLiLn_{(1-x)}X_6 : xCe^{3+}$, where X is either Br or I, Ln is Y or Gd or Lu or Sc or La, where z is greater or equal to 0 and less or equal to 2, and x is above 0.0005; and

a detector which detects luminescence emitted from the scintillating material as a measure of the presence of neutrons in a radiation sample applied to the neutron detector.

Claim 2 (Previously Presented): The neutron detector according to claim 1, wherein x is above 0.005.

Claim 3 (Previously Presented): The neutron detector according to claim 1, wherein x is less than 0.3.

Claim 4 (Previously Presented): The neutron detector according to claim 1, wherein x is less than 0.15.

Claim 5 (Previously Presented): The neutron detector according to claim 1, wherein it is in the form of a monocrystal.

Claim 6 (Previously Presented): The neutron detector according to claim 5, wherein the volume of the monocrystal is at least 10 mm^3.

Claim 7 (Previously Presented): The neutron detector according to claim 1, wherein the scintillating material is in the form of a powder.

Claim 8 (Previously Presented): The neutron detector according to claim 1, wherein the scintillating material is packed, sintered, or mixed with a binder.

Claim 9 (Previously Presented): The neutron detector according to claim 1, wherein the scintillating material formula is $Cs_2LiYX_6:xCe^{3+}$.

Claim 10 (Previously Presented): The neutron detector according to claim 1, wherein the scintillating material formula is $Rb_2LiYX_6:xCe^{3+}$.

Claim 11 (Previously Presented): A method of neutron detection comprising

applying radiation to a detector comprising a material of formula $Cs_{(2-z)}Rb_zLiLn_{(1-x)}X_6:xCe^{3+}$, where X is either Br or I, Ln is Y or Gd or Lu or Sc or La, where z is greater or equal to 0 and less or equal to 2, and x is above 0.0005; and

measuring luminescence from the detector as a measure of the presence of neutrons in the radiation.

Claim 12 (Previously Presented): The method according to claim 11, wherein x is above 0.005.

Claim 13 (Previously Presented): The method according to claim 11, wherein x is less than 0.3.

Claim 14 (Previously Presented): The method according to claim 13, wherein x is less than 0.15.

Claim 15 (Previously Presented): The method according to claim 11, wherein the material is in the form of a monocrystal.

Claim 16 (Previously Presented): The method according to claim 15, wherein the volume of the monocrystal is at least 10 mm^3.

Claim 17 (Previously Presented): The method according to claim 11, wherein the material is in the form of a powder.

Claim 18 (Previously Presented): The method according to claim 17, wherein the material is packed, sintered, or mixed with a binder.

Claim 19 (Previously Presented): The method according to claim 11, wherein the material formula is $Cs_2LiYX_6:xCe^{3+}$.

Claim 20 (Previously Presented): The method according to claim 11, wherein the material formula is $Rb_2LiYX_6:xCe^{3+}$.

Claims 21-30 (Cancelled)